DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015250

Address: 333 Burma Road **Date Inspected:** 29-Jun-2010

City: Oakland, CA 94607

OSM Arrival Time: 630 **Project Name:** SAS Superstructure Prime Contractor: American Bridge/Fluor Enterprises, a JV **OSM Departure Time:** 1500 Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

CWI Name: Yes No Bernard Docena, Jesse Cayabyab SiW McSentnell **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Weld Procedures Followed: Yes N/A **Electrode to specification:** No Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: SAS OBG**

Summary of Items Observed:

The Quality Assurance (QA) Inspector, Rick Bettencourt was on site at the job site between the times noted above. The QA Inspector was on site to randomly observe the in process welding and inspection of the weld joints identified 4E/5E-C1, 1W/2W-C and the following observations were made:

4E/5E-C2

Upon the arrival of the QA Inspector at the above identified weld joint it was observed and noted, the above identified weld joint appeared to be approximately 95% completed. The QA Inspector observed the approximately 630mm at the bottom of the weld joint which could not be reached by with the semi-automated bug-o track system. The QA Inspector randomly observed the American Bridge/Fluor (ABF) welder Song Tao Hunag setting up to perform shielded metal arc welding (SMAW) of the 630mm of weld joint identified above. The QA Inspector randomly observed the Smith Emery (SE) Quality Control (QC) Inspector Bernard Docena set the SMAW parameters prior to the ABF welder performing welding of the 380mm of the weld joint. The QA Inspector noted the ABF welder was utilizing 1/8" E7018 low hydrogen electrodes with 127 Amps. The QA Inspector noted the SMAW parameters appeared to be in general compliance with the contract documents. The QA Inspector randomly observed the ABF welder perform the SMAW root/fill and cover pass. The QA Inspector noted the ABF welder did complete the above identified weld on this date. After the weld was completed the QA Inspector randomly observed the QC Inspector begin to perform visual testing of the completed weld.

1W/2W-B

Upon the arrival of the QA Inspector in the AM it was observed the ABF welder James Zhen was setting up to perform the FCAW back weld at the above identified location. The QA Inspector randomly observed the SE QC

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Inspector Tom Pasqualone indicate numerous areas where additional grinding was required. The QA Inspector performed random visual testing of the back gouged vertical weld joint, and noted several slag pockets which would require additional grinding. The QA Inspector randomly observed the ABF welder begin excavating the slag pockets utilizing a burr bit grinder. The QA Inspector noted the ABF welder spent the remainder of the shift grinding the slag pockets out the back gouged vertical weld joint.

The QC Inspector informed the QA Inspector, after the additional grinding tasks were completed the ABF welder would have to make SMAW repairs. The QC Inspector went on to inform the QA Inspector if the excavations run too deep, he will have the welder make SMAW repairs to the ground or excavated areas. The QC Inspector elaborated by saying the weld will likely be to thin to begin the FCAW back weld prior to repairing by SMAW. The QA Inspector noted no welding repairs were performed on the QA Inspectors shift.

OBG 6W

The QA Inspector observed and noted the OBG 6W was lifted and set into place in the 6W cradle. The QA Inspector noted the OBG was not pushed into place on this date. The QA Inspector noted no additional erection tasks were performed on the 6W OBG on this date. The QA Inspector spoke with the Project Engineer John Callaghan (see summary of conversation)



Summary of Conversations:

The QA Inspector asked Mr. Callaghan if the OBG 6W would be pushed into place and fit up prior to the end of the week. Mr. Callaghan informed the QA Inspector, the ABF welder Rick Clayborn and his helper were on vacation this week and the fit up of the 5W/6W-A and D weld joints would not likely be completed until after the Holiday week end on Tuesday 7/6/10.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916)-813-3677, who represents the Office of Structural Materials for your project.

Inspected By:

Bettencourt, Rick

Quality Assurance Inspector

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Reviewed By: Levell,Bill QA Reviewer